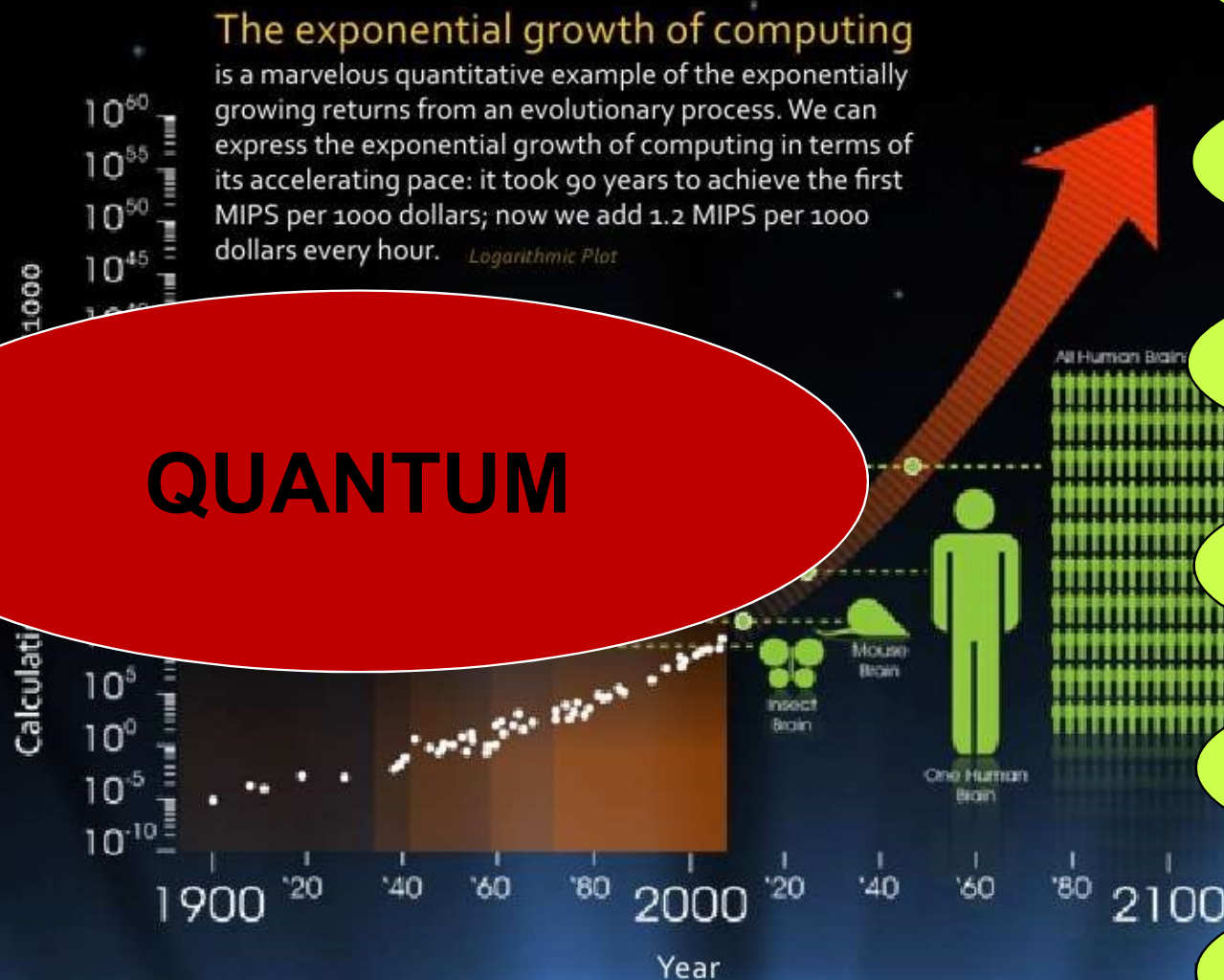


# **DIGITAL SOCIETY OF TRUST**

**-A NEW PARADIGM FOR EUROPEAN SOVEREIGNTY**

**PEKKA SIVONEN**  
EXECUTIVE DIRECTOR  
DIGITAL TRANSFORMATION  
OF FINNISH INDUSTRIES

HELSINKI, MARCH 12<sup>TH</sup> 2019



**QUANTUM**

**AI**

**AR/VR**

**~~100X~~**

**5G/6G**

**BLOCKCHAIN**

**IoT**



**BUSINESS  
FINLAND**

# **DIGITAL TRANSFORMATION**

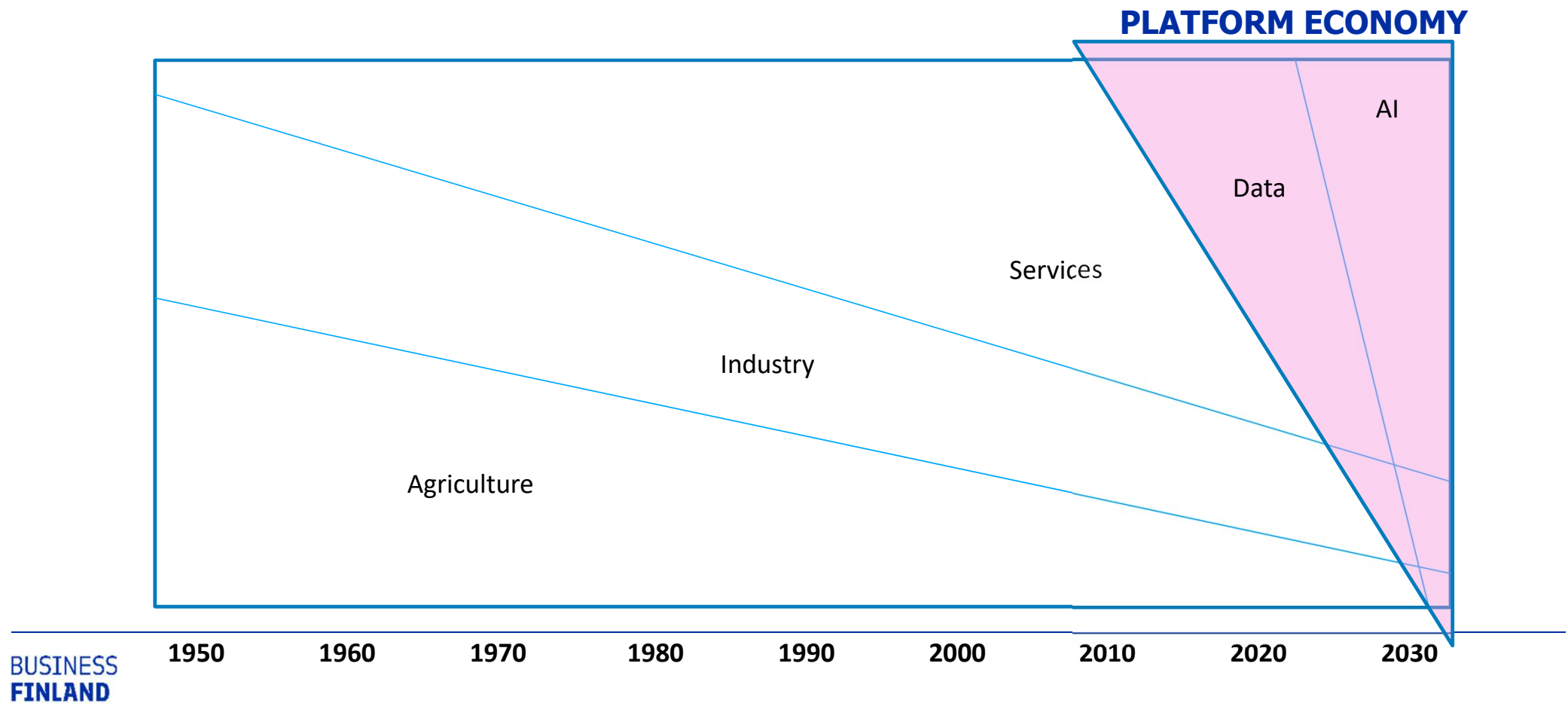
**WORLD ECONOMY  
80 TRILLION USD**

**EUROPE 4% OF  
TOP 50 PLATFORMS**

**"We estimate that digitalization could deliver around \$100 trillion USD in value to business and society over the next decade."**

**WORLD ECONOMIC FORUM**  
DIGITAL TRANSFORMATION INITIATIVE MAY 2018

# The changing structure of the Finnish national economy





# DIGITAL INFRA- STRUCTURE IS THE NEW CRITICAL INFRA- STRUCTURE

500 BILLION DEVICES BY 2030





# AI ENABLED 5G CYBERSECURITY —WHY IT MATTERS FOR EUROPE ?

5G networks will play a central role in achieving the digital transformation of the EU's economy and society.

Indeed, 5G networks have the potential to enable and support a wide range of applications and functions, extending far beyond the provision of mobile communication services between end-users.

With worldwide 5G revenues estimated at €225 billion in 2025, **5G technologies and services are a key asset for Europe to compete** in the global market.

The cybersecurity of 5G networks is therefore essential to protect our economies and societies and to enable the full potential of the important opportunities they will bring.

It is also crucial for ensuring **the strategic autonomy of the Union**



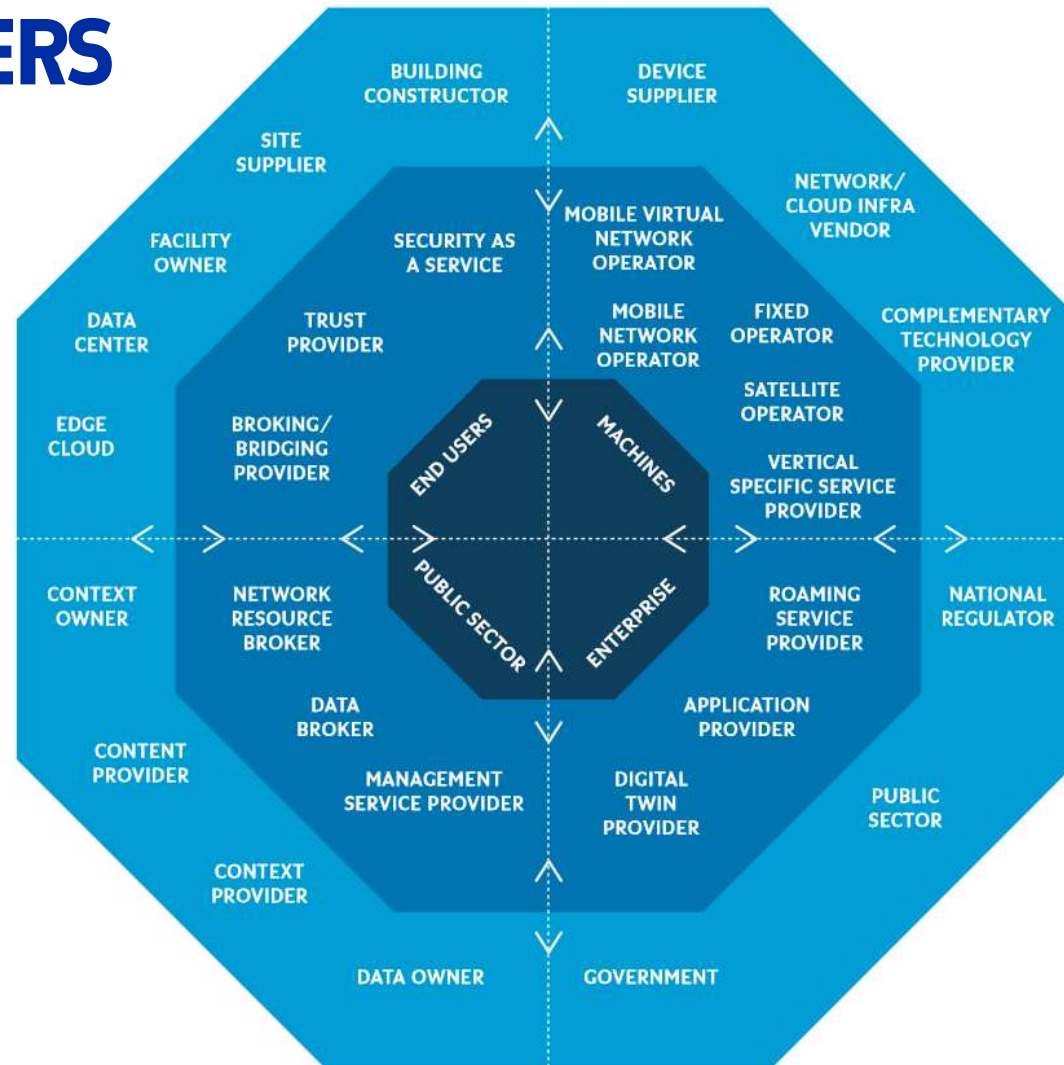
**IT'S NOT  
JUST ABOUT  
TECHNOLOGY  
OR SECURITY**

**IT'S ABOUT  
THE FUTURE  
OF YOUR  
COUNTRY!**



**WHO DO  
YOU TRUST  
MOST AS  
A PARTNER  
FOR YOUR  
SOCIETY'S  
FUTURE ?**

# STAKEHOLDERS IN FUTURE 5G/6G ECOSYSTEM



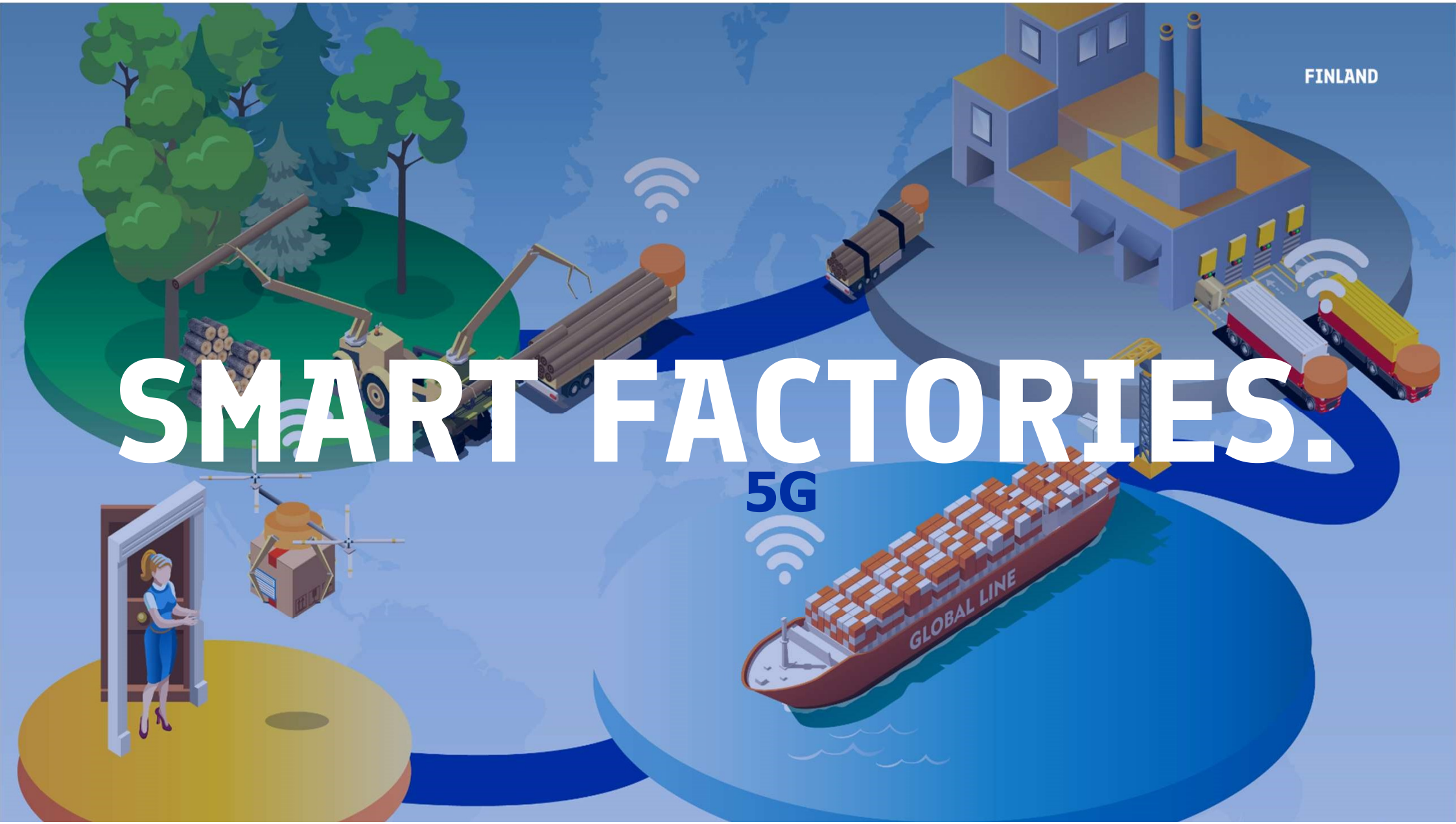


# SMART FACTORIES.

FINLAND

5G

GLOBAL LINE



Industry is one of the pillars of the European economy – the manufacturing sector in the European Union accounts for 2 million enterprises, 33 million jobs and 60% of productivity growth.

We stand on the brink of a new industrial revolution, driven by new-generation information technologies such as the [Internet of Things](#) (IoT), cloud computing, big data and data analytics, robotics and 3D printing. They open new horizons for industry to become more adventurous, more efficient, to improve processes and to develop innovative products and services.

# EUROPE IS THE PAST, PRESENT AND FUTURE OF MANUFACTURING



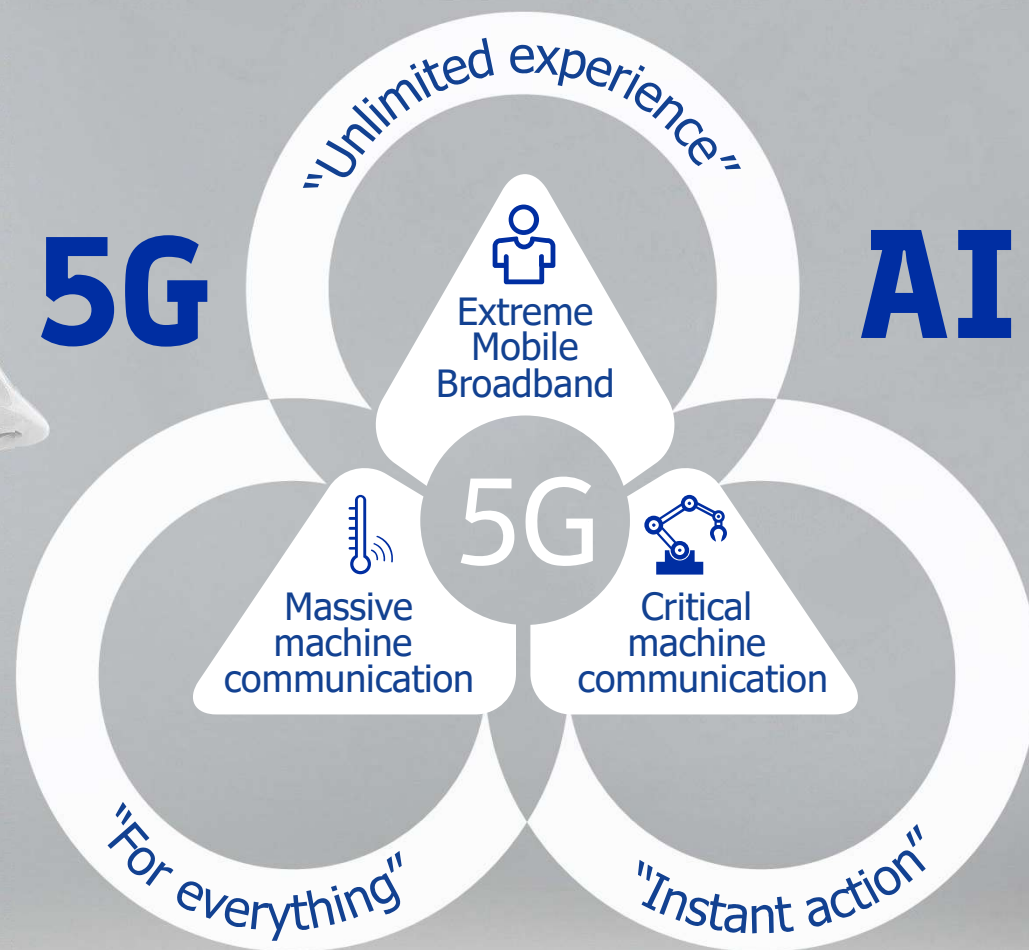


# INTRODUCING PRODUCTIVITY TO LEVELS UNSEEN



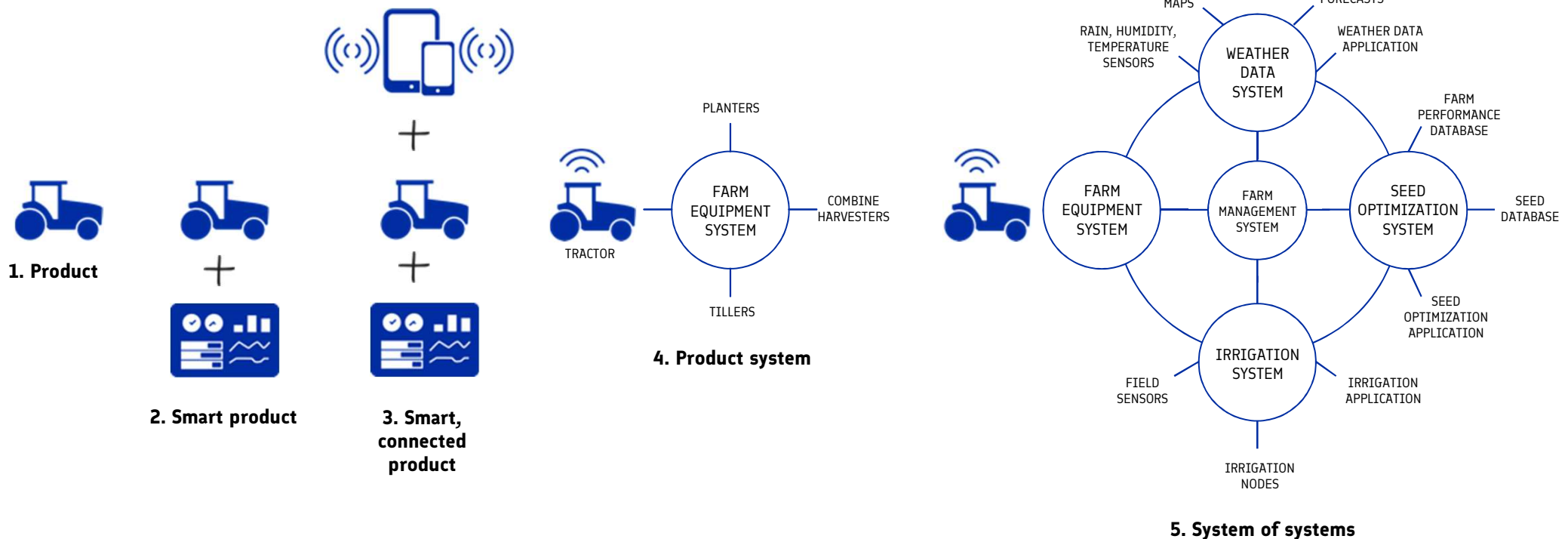
## 5G

## AI



## ROBOTICS

# Redefining Industry Boundaries; Systems of Systems





## GAIA-X Tasks

### Creating framework conditions

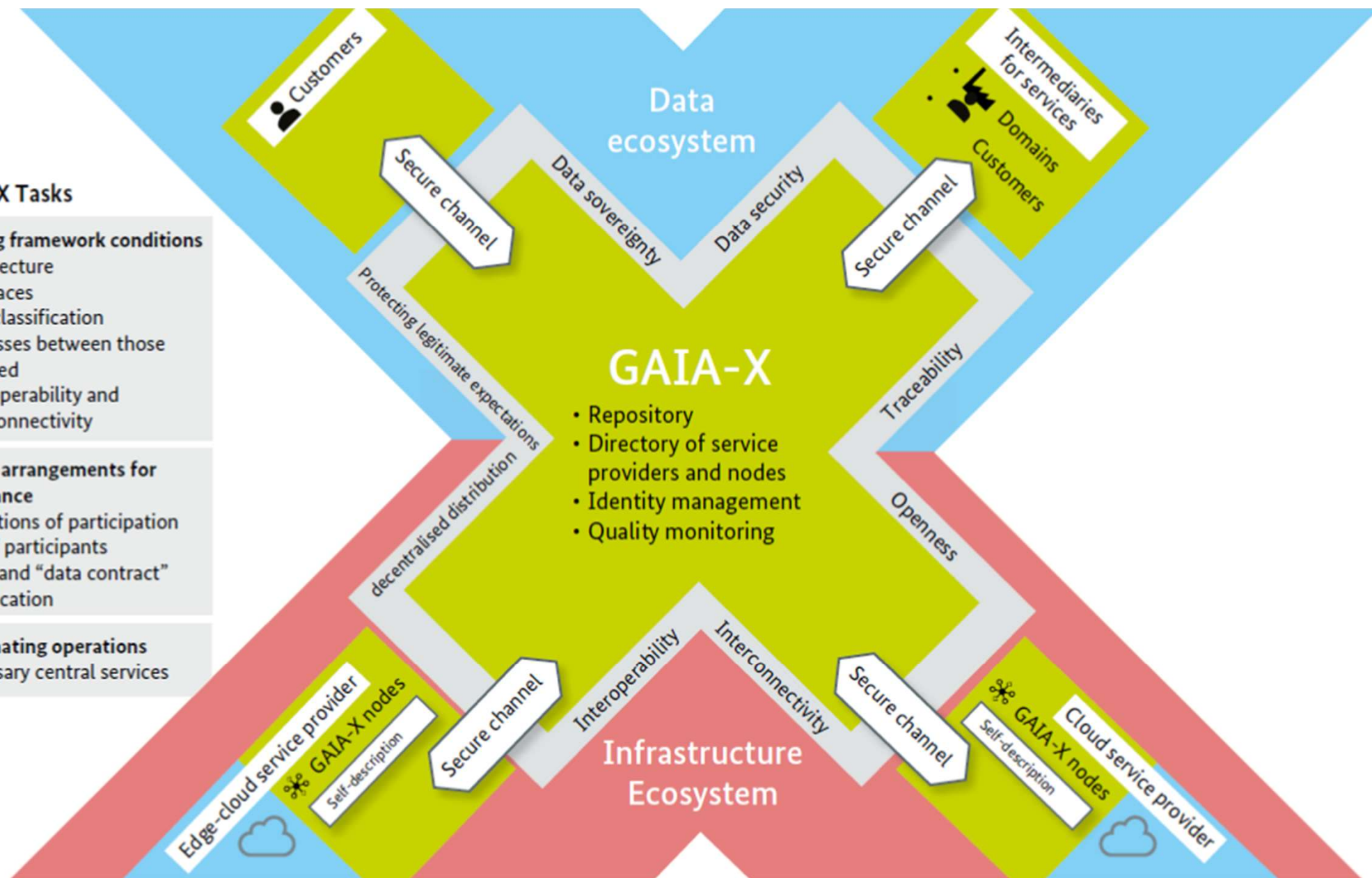
- Architecture
- Interfaces
- Data classification
- Processes between those involved
- Interoperability and interconnectivity

### Making arrangements for governance

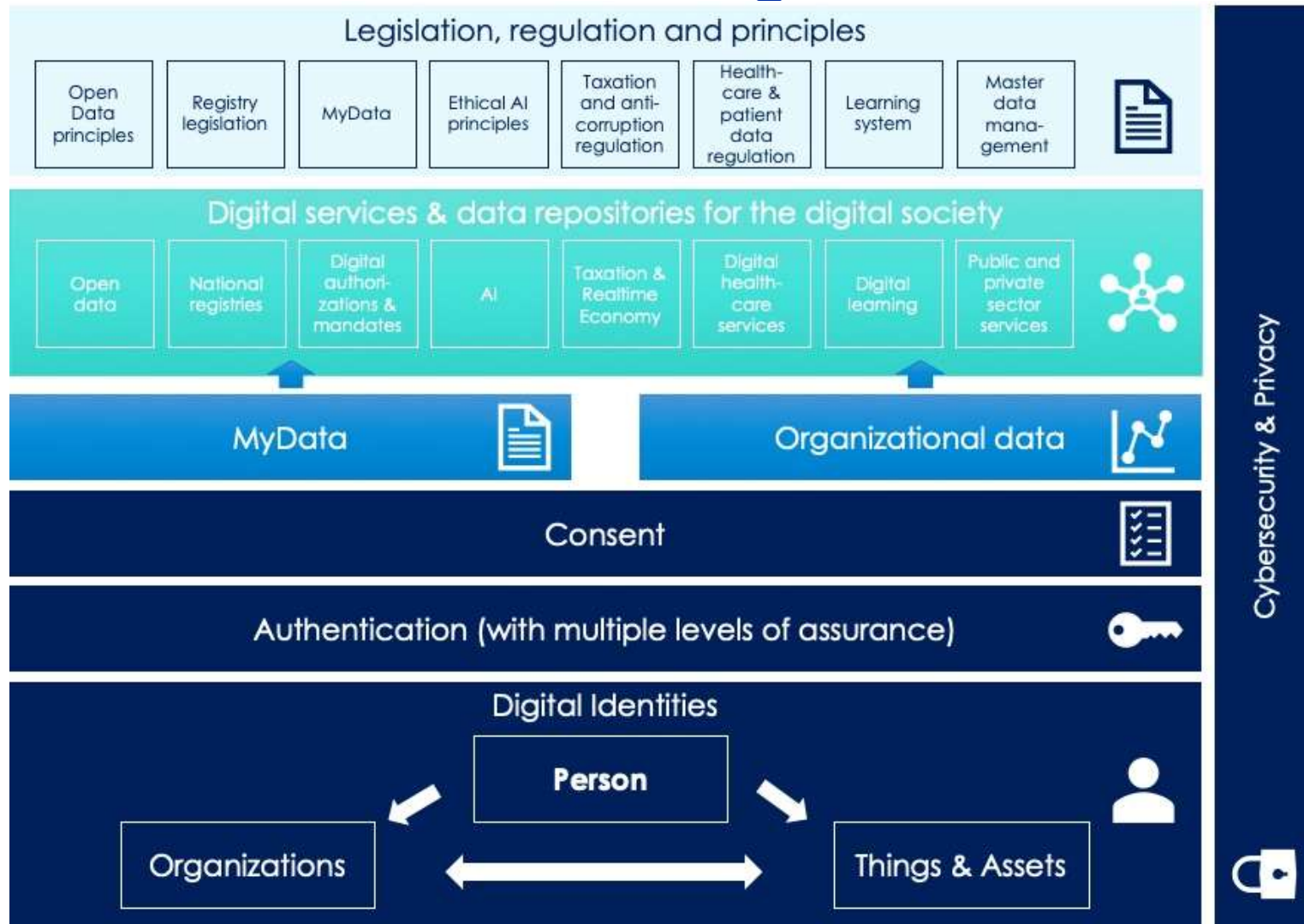
- Conditions of participation
- List of participants
- Rules and “data contract”
- Certification

### Coordinating operations

- Necessary central services



# Foundation for Digital Trust



 **SISUID**

 **FINDY**

**BUSINESS  
FINLAND**





**ONE LOGIN TO WHOLE DIGITAL SOCIETY**

**SOLUTION IS ONE, FREE AND SECURE NATIONAL IDENTITY FOR EVERYONE**

DIGITAL PROFILES  
AND PASSWORDS



Identity verification  
successful

LOYALTY CARDS,  
CUSTOMER PROFILES  
AND PERMITS



WEB OF DATA



PHYSICAL SERVICES  
AND DEVICES



LOA 0&1

LOA 2



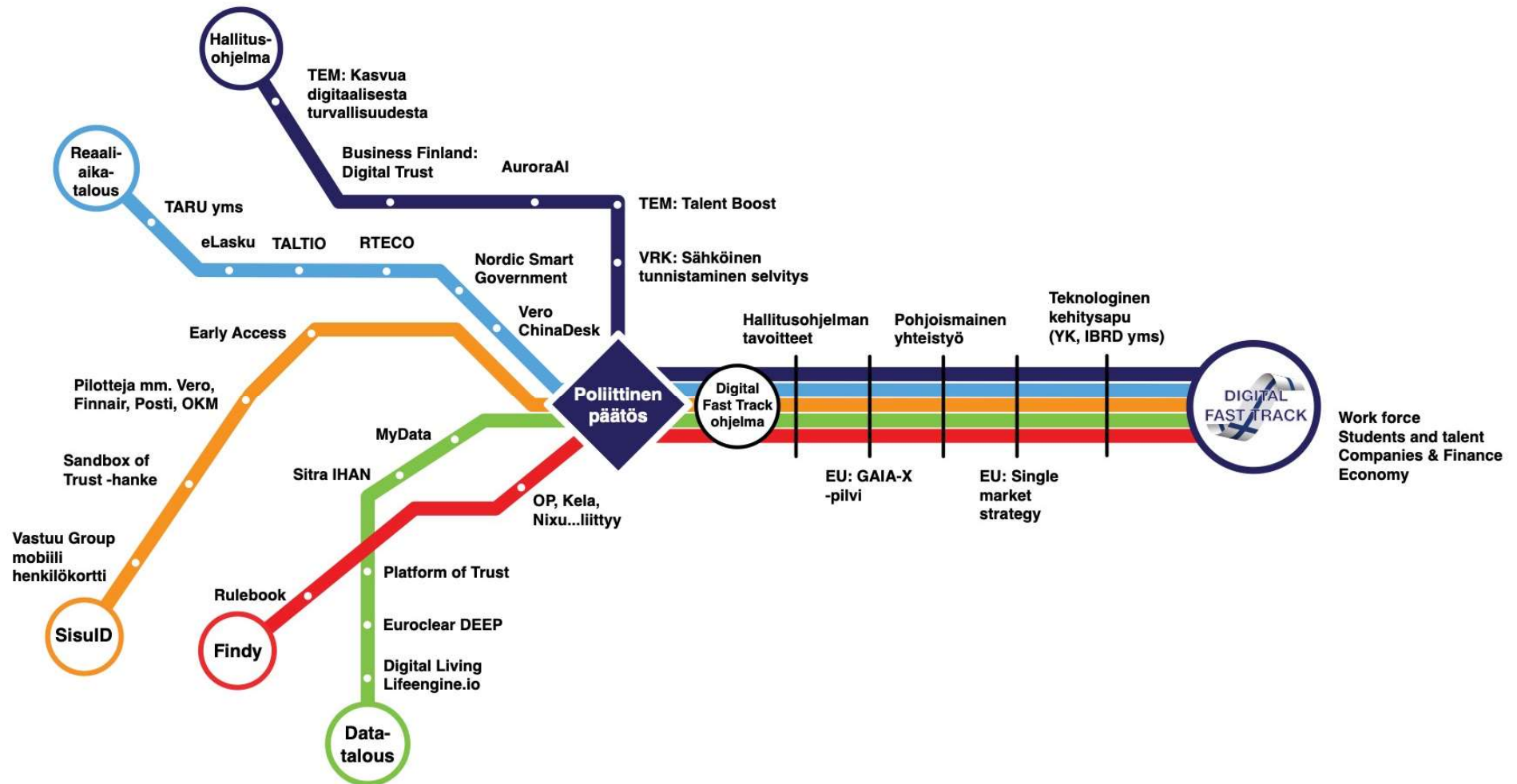
**EEVERTTI**

*The solution, SisUID; an open source based digital identity registration and authentication platform. Free for all citizens. No transaction costs. Built on governmental trust with passports. Supports multiple levels of trust. Also de-centralized.*



Made in  
Finland

# Digital Fast Track –program

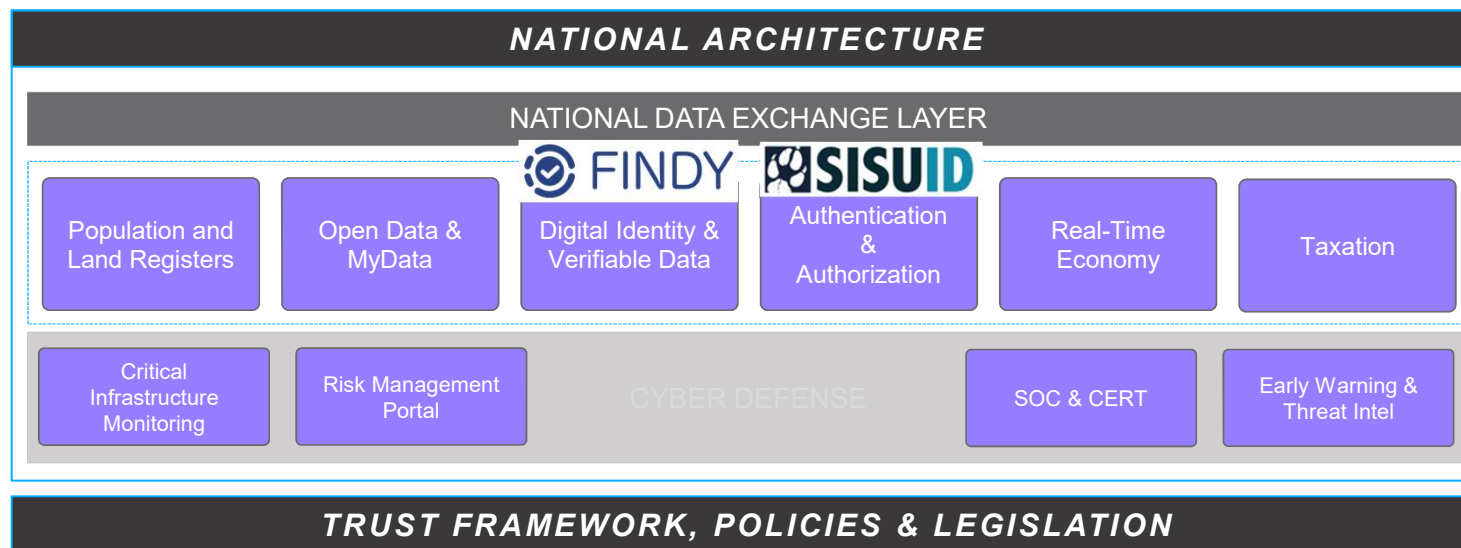




# Architecture blueprint for Digital Society



- Modular building blocks for developing a digital society
- Produced in ***public-private partnership***
- Reusable ***free open source*** technology and open protocols
- Necessary policy and legislation framework included
- Secure and privacy-aware



# FACTS: FINLAND IS...

FINLAND

## #1

**MOST INNOVATIVE  
COUNTRIES\*\***

## #1

**IN AVAILABILITY OF  
SCIENTISTS & ENGINEERS\***

## #1

**TRUSTED  
NATION**

## #1

**IN AVAILABILITY  
OF LATEST TECHNOLOGIES\***

## #2

**HIGHER EDUCATION  
AND TRAINING\***

## #2

**POTENTIAL IN AI  
UTILIZATION\*\***

*\*World Economic Forum Global Competitiveness Report 2017-2018 / \*\*The Consumer Technology Association (CTA)™ 2018  
\* \* Accenture*



# **Finnish Innovation Ecosystem is a Pool-Party for everybody!**

**Government**

**Universities & Research  
Institutes**

**Start-ups & SMEs**

**Large Enterprises**





**BUSINESS  
FINLAND**

**THANK YOU!**

PEKKA SIVONEN  
EXECUTIVE DIRECTOR,  
DIGITAL TRANSFORMATION  
OF FINNISH INDUSTRIES

[PEKKA.SIVONEN@BUSINESSFINLAND.FI](mailto:PEKKA.SIVONEN@BUSINESSFINLAND.FI)

+358 45 895 0966

**SAFE  
CONNECTED  
DIGITAL  
FINLAND**

**JOIN THE DIGITAL TRUST CHALLENGE 2020!**

[www.businessfinland.fi/en/digitaltrust/challenge](http://www.businessfinland.fi/en/digitaltrust/challenge)